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CRYOGENICS

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Subject: Telnet Control

Telnet Server Operation

The ValveControl telnet server offers very basic remote controlling capabilities to control the system. The system takes normal newline terminated strings as input and outputs the response in the same way.

To use remote telnet controlling, the remote control server must be started from the ValveControl program setup tab. You must specify the port which to use on the server. Once the server has been started, it can be used by connecting to it for example using the telnet client.

For example the command `telnet localhost 1234` will open telnet connection to localhost (current computer) which is running the ValveControl and server running at port 1234.

Note: Currently the remote connection does not require any kind of authentication or provide in any other way a secure connection, so one should not use this feature if the computer is connected directly to internet.

Commands:

```
remote <n>
```
Sets remote true if `<n>` *is set to 1 or false if set to 0. If called without parameters then this will only return current status of remote.*
Note: *Remote needs to be enabled (true) in order to write commands.*

```
on <ch1>,<ch2>, ... ...,<chN>
off <ch1>,<ch2>, ... ...,<chN>
switch <ch1>,<ch2>, ... ...,<chN>
```
Turns on/off/switches channels ch1, ch2, ... , chN.

```
state <ch1>,<ch2>, ... ...,<chN>
```
Prints out status of specified channels. If no channels are specified then the states of all channels will be printed.

```
names
```
Prints out the names of all the channels.

```
mgstatus <N>
```
Prints the pressure of MaxiGauge channel N where N is number between 1 (P1) and 6 (P6)

```
exit
```
Terminates the connection.

Possible response codes:

```
S00: Ok
```
On/off/switch command execution was successful.

```
S01: bye
```
Response from exit *command indicating the termination of connection.*

```
S02: <ch1>,<ch2>, ...,<chN>
```
Response from state *command which contains list of the states of the channels specified in* state *command parameter.*

```
S03: <ch1>,<ch2>, ...,<chN>
```
Lists status of all the channels. If state *command was issued without specifying any channels then all the channels will be displayed. The order of channels is the same as in* names *command output.*

```
S04: <ch1>,<ch2>, ...,<chN>
```
Response from names *command which contains list of all the channel names on system.*

```
S05: <n>
```
Response from mgstatus *command.* <n> *is the pressure of channel in scientific notation.*

```
S06: <n>
```
Response from remote *command, where* <n> *is 0 if remote is false and 1 if true.*

Error codes:

```
E00: Unknown command: "<command>"
E01: Variable not found
E02: Code is running
E03: Couldn't communicate with the system
E05: System is in local mode
E06: Invalid mg channel specified
E07: Invalid parameters
E08: System not in remote mode
E09: Maxigauge communication failure
E99: Unknown
```